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January 19, 1999

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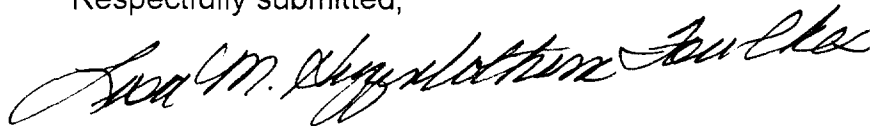
RE: Comments in Response to FCC's Third Notice of Proposed  
Rulemaking in WT Docket No. 96-86

Dear Ms. Salas:

On behalf of the Commonwealth of Pennsylvania (hereinafter the "Commonwealth"), and pursuant to Section 1.415 of the Commission's Rules, 47 C.F.R. § 1.415, enclosed herewith for filing are an original and four (4) copies of the Commonwealth's Comments in response to the Commission's Third Notice of Proposed Rulemaking in the above-captioned proceeding.

Kindly stamp and return to this office the enclosed copy of this filing designated for that purpose. You may direct any questions concerning this material to the undersigned, counsel to the Commonwealth of Pennsylvania

Respectfully submitted,



Lisa M. Higginbotham Fowlkes

Enclosures

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**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

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In the Matter of )  
 )  
The Development of Operational, )  
Technical and Spectrum Requirements )  
For Meeting Federal, State and Local )  
Public Safety Agency Communication )  
Requirements Through the Year 2010 )  
 )  
Establishment of Rules and Requirements )  
For Priority Access Service )

WT Docket No. 96-86

**COMMENTS OF  
THE COMMONWEALTH OF PENNSYLVANIA**

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January 19, 1999

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## **EXECUTIVE SUMMARY**

The Commonwealth of Pennsylvania (hereinafter, the "Commonwealth") strongly urges the Commission to assign at least a portion of the 2.6 MHz of interoperability spectrum directly to the states. As explained further in these Comments, many states already have the necessary technical and policy expertise needed to manage a wide-area interoperable system, particularly one involving coordination among a variety of public safety providers. In addition, direct licensing of the interoperability spectrum to states will ensure the participation of state governments in the planning, development, and operation of the 700 MHz interoperable system.

The Commonwealth also supports assigning at least some of the 8.8 MHz of reserved spectrum directly to states to facilitate the construction of statewide systems. The Commonwealth believes that such systems benefit all public safety providers within the state and, therefore, serve the public interest. Moreover, direct licensing of such spectrum to states will ensure faster construction and deployment of these systems.

The Commonwealth also recommends that the Commission designate some of the reserved spectrum for vehicular repeater operations. Such action would reduce costs associated with construction of statewide systems, particularly in states such as Pennsylvania where there are numerous rural communities located within mountainous regions.

Finally, the Commonwealth supports designating spectrum in bands below 512 MHz for interoperability. Such action will provide access to interoperability channels to public safety entities that cannot immediately migrate to the 700 MHz band or that do not have access to 800 MHz frequencies.

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Before the  
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Washington, DC 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

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)  
Establishment of Rules and Requirements )  
For Priority Access Service )

COMMENTS OF  
THE COMMONWEALTH OF PENNSYLVANIA

The Commonwealth of Pennsylvania (hereinafter, the "Commonwealth"), by its undersigned counsel and pursuant to Section 1.415 of the Commission's Rules and Regulations,<sup>1/</sup> hereby files its comments in response to the Commission's Third Notice of Proposed Rulemaking in the above-captioned proceeding.<sup>2/</sup> In the Third Notice, the Commission sought comment on, inter alia: (1) whether the 2.6 MHz of "interoperability" spectrum should be licensed directly to states; (2) whether at least a portion of the 8.8 MHz of reserved spectrum should be licensed to states for the purpose of constructing

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<sup>1/</sup> 47 C.F.R. § 1.415. On December 24, 1998, the Public Safety and Private Wireless Division extended the period for initial comments in response to the Third Notice from January 4, 1999 to January 19, 1999. The Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket No. 96-86, Order, DA 98-2588 (December 24, 1998).

<sup>2/</sup> The Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket No. 96-86, First Report and Order and Third Notice of Proposed Rulemaking, FCC 98-191 (released September 29, 1998) ("Third Notice").

statewide systems; and (3) whether spectrum below 512 MHz should be designated for interoperability purposes.

## **I. INTRODUCTION AND STATEMENT OF INTEREST**

The Commonwealth commends the Commission's adoption of service and licensing rules for the 24 MHz of public safety spectrum on the 700 MHz band. These rules make available much needed additional spectrum to address public safety communications needs. For example, the Commission's action in the First Report and Order provides much needed additional spectrum for public safety emergency and day-to-day communications needs. In addition, this action provides necessary spectrum to facilitate interoperable communications.

Notwithstanding the Commission's actions, much work still needs to be done in order to fully address current and future public safety communications needs -- a fact recognized by the Commission as evidenced by its adoption of a Third Notice in this proceeding. As a state actively engaged in the construction of a statewide interoperable system,<sup>3/</sup> the Commonwealth has a significant interest in many of the issues raised in the Third Notice. For the reasons discussed below, the Commonwealth strongly urges the Commission to assign at least a portion of the 2.6 MHz of interoperability spectrum directly to states. In addition, the Commonwealth supports the assignment of at least a portion of the 8.8 MHz of reserved spectrum directly to states

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<sup>3/</sup> The Commission has issued to the Commonwealth licenses for conventional and trunked 800 MHz channels upon recommendation of the Planning Committees of Regions 28 and 36, in accordance with the Commission's rules governing the implementation of the Public Safety National Plan. The Commonwealth is using these channels to construct a statewide communications system for use by public safety agencies throughout the state.

for the construction of statewide systems. In addition, the Commonwealth urges the Commission to designate a portion of the reserved spectrum for vehicular repeater operations. Finally, the Commonwealth supports allocating spectrum below 512 MHz for use for interoperable communications.

## **II. 2.6 MHz INTEROPERABILITY SPECTRUM**

The Commonwealth strongly urges the Commission to license at least a portion of the interoperability spectrum directly to states.<sup>4/</sup> Many states, such as Pennsylvania, are already in the process of constructing or operating an interoperable system on a broad, wide-area basis. As the Commission noted in its Third Notice,<sup>5/</sup> several states have already constructed or plan to construct a statewide public safety communications system. Most, if not all of these systems, are designed to facilitate interoperable communications among different public safety agencies throughout the state and, in some cases, Federal agencies and non-government public safety providers.<sup>6/</sup> For example, Pennsylvania's system will permit communications between state agencies, between state and local agencies, and between local government agencies which elect to use the system. This system will be accessible not only to large metropolitan areas, but also to rural communities which comprise the vast majority of local governments within the state. Thus Pennsylvania, as well as other similar states, already have the technical and policy expertise necessary to construct and administer a wide-area

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<sup>4/</sup> See Third Notice, at ¶ 182.

<sup>5/</sup> Id., at ¶ 178.

<sup>6/</sup> Id., at ¶ 174.

interoperable communications system, particularly one requiring coordination among a variety of different public safety providers.

In addition, because of the expertise already acquired by these states, direct licensing of at least a portion of the interoperability spectrum would speed the construction and commencement of operation of such a system. Indeed, in some cases, 700 MHz interoperability frequencies could simply be incorporated into the statewide systems that already exist or will be constructed. This undoubtedly will result in speedier deployment and use of the 700 MHz interoperability frequencies as compared to a licensing scheme based solely on a regional planning approach.

Moreover, in many states, including Pennsylvania, a major component in the development of interoperable systems in general has been the active involvement of state agencies. In Pennsylvania, for example, state agencies have acted as a facilitator and bridge between various local agencies, local and Federal agencies and even public safety agencies and non-government public safety providers, in the development of the statewide interoperable communications system and in the coordination of multi-jurisdictional responses to public safety emergencies in general. Licensing at least a portion of the 2.6 MHz of interoperability spectrum would ensure the participation of state agencies in the planning, development and operation of the 700 MHz band interoperable system.

The Commission clearly has statutory authority to license the interoperability spectrum directly to the states.<sup>27</sup> Nothing in the Balanced Budget Act of 1997, its

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<sup>27</sup> See *Id.*, at ¶ 184.



legislative history, or the Communications Act in general mandates licensing of the 700 MHz spectrum using a regional planning approach. Accordingly, the Commission has discretion to license at least a portion of the interoperability spectrum directly to states.

### **III. 8.8 MHz OF RESERVED SPECTRUM**

#### **A. Licensing of the 8.8 MHz of Spectrum**

1. The Commission Should Assign At Least A Portion of the Reserved Spectrum Directly to States To Facilitate Construction of Statewide Systems.

The Commonwealth supports assignment of at least a portion of the 8.8 MHz of reserved spectrum directly to states for purposes of facilitating the construction of statewide systems.<sup>8/</sup> These systems can provide economies of scale and other benefits not only to state agencies, but also to local government public safety agencies within the state. Specifically, a statewide system can facilitate interoperability among its users which, in turn, will facilitate more efficient coordination among public safety agencies (within adjacent municipalities and on the state and local levels). Moreover, such systems can provide access to a state-of-the-art communications system to municipalities that do not have the funds to construct or upgrade their own systems. This is particularly true in states such as Pennsylvania which consist of primarily small, rural localities, many of which do not have the funds or expertise to construct a wide-area system or deploy a system using innovative, spectrally-efficient technologies. For these municipalities, the costs of participating in a statewide system are certainly lower than what would be incurred if the municipality had to construct a new system or

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<sup>8/</sup> See *Id.*, at ¶ 169.

upgrade a currently outdated system. Thus, these local governments have every incentive to participate in a statewide communications system.

The same is true for local governments located in remote areas of a state where there is a dearth of available frequencies with which to construct a state-of-the-art wide-area system and for whom there is no alternative commercial provider or private communications system. In such cases, these local public safety agencies benefit from access to an advanced communications system that allows them to communicate with other public safety agencies throughout the state during emergencies and at a lesser cost than if they were to construct their own system or, in many cases, had the option of obtaining service from a commercial provider or private system operator.

Awarding licenses for statewide systems directly to the states would also ensure faster deployment of the system because states would not be required to endure what sometimes can be a time consuming planning, coordination, and application process in order to acquire much needed frequencies.

In summary, assignment of a least a portion of these frequencies directly to states for the purpose of construction and operation of statewide systems would provide benefits to both state governments as well as local government public safety agencies and, therefore, would serve the public interest. Moreover, licensing the reserved spectrum directly to the states would be consistent with the Commission's statutory authority.<sup>9/</sup> As is the case with respect to the interoperability spectrum, nothing in the Balanced Budget Act of 1997, its legislative history, or the

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<sup>9/</sup> Third Notice, at ¶ 184.

Communications Act in general mandates licensing of the 700 MHz spectrum using a regional planning approach. Thus, the Commission has discretion to license portions of both the interoperability spectrum and the reserved spectrum directly to states. Accordingly, the Commonwealth supports the assignment of at least a portion of the 8.8 MHz of spectrum directly to states.

2. Alternatively, the Commission Should License the Reserved Spectrum Using a Regional Planning Process In Which the Regional Committee Jurisdictions Are Based On State Geographic Boundaries.

To the extent the Commission does not designate reserved spectrum for direct state licensing, the Commonwealth strongly urges the Commission to use a regional planning approach in which the regional jurisdictions are drawn based on state geographic boundaries. Such an approach is necessary for states such as Pennsylvania which, under previous regional planning approaches, has been divided into more than one region and, as a result, has had to spend additional time and resources in its efforts to coordinate statewide planning assignments and resolve conflicts with adjacent areas (both within and outside Pennsylvania's boundaries).<sup>10/</sup> Moreover, as the Commonwealth has noted previously,<sup>11/</sup> use of multi-state regional

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<sup>10/</sup> See Comments of the Commonwealth of Pennsylvania, at 11-12 filed December 22, 1997 in The Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket No. 96-86, Second Notice of Proposed Rulemaking, 12 FCC Rcd 17706 (1997) (hereinafter "Commonwealth Comments").

<sup>11/</sup> See Commonwealth Comments, at 11.

planning boundaries does not take into account changes in focus on planning efforts from local or county to statewide within individual states.<sup>12/</sup>

**B. The Commission Should Designate A Portion Of The Reserved Spectrum For Vehicular Repeater Operations.**

The Commission sought comment on alternative uses for the 8.8 MHz of reserve spectrum.<sup>13/</sup> In developing its statewide system, the Commonwealth has identified a strong need for vehicular repeater operation and, accordingly, urges the Commission to designate some of the reserved spectrum for this purpose.

The cost of deploying an integrated regional or statewide communications system increases directly with the expansion of the service area to be covered. Furthermore, in order to meet fully the communications needs of public safety entities, these systems must support use of portable radios, and system construction costs increase significantly with the requirement for additional portable radio coverage. These costs become even more substantial in rural areas (such as those in Pennsylvania) that are located in mountainous areas.

Use of vehicular repeaters can minimize these costs, while addressing a number of public safety communications needs. For example, use of vehicular repeaters allows a reduction in the number of fixed network sites that are needed for public safety communications systems, which in turn yields a greater than proportional reduction in the costs of constructing and operating the statewide system. Moreover, use of these

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<sup>12/</sup> Alternatively, the Commonwealth supports use of the "opt-out" provisions adopted in the First Report and Order.

<sup>13/</sup> Third Notice, at ¶ 181.

repeaters allows significant cost savings in the development of statewide systems in less densely populated county or regional areas. Without the ability to utilize repeaters in this case, Pennsylvania and similar states would be forced to spend substantially more for constructing radio sites and infrastructure to accommodate a small number of users.<sup>14/</sup>

Vehicular repeaters also provide a reasonable alternative to on-scene coordination during the critical first few minutes or hours of an emergency. Designing a limited number of mobile repeater pairs may enable additional responding agencies to more readily identify the on-scene command frequencies in use. This approach is much more cost-effective, and more efficient on-scene, in a predominately rural state such as Pennsylvania, than mandating installation of conventional repeaters on interoperability spectrum at existing sites.<sup>15/</sup> In light of these benefits, the Commonwealth believes that designation of some of the channels in the reserved spectrum serves the public interest and recommends that the Commission designate 15 channels in the reserved spectrum for this purpose.

**IV. STATE GOVERNMENT ENTITIES HOLDING LICENSES FOR INTEROPERABILITY OR RESERVED SPECTRUM FREQUENCIES SHOULD BE ALLOWED TO SHARE THOSE FREQUENCIES WITH OTHER PUBLIC SAFETY ENTITIES.**

The Commission asked whether it should allow states licensed to operate interoperability or reserved spectrum channels to share their facilities with other local

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<sup>14/</sup> In light of the dense population characteristic of these areas, it is unlikely that commercial providers would be inclined to construct systems to serve these areas.

<sup>15/</sup> See Commonwealth Comments, at 13-14.

political subdivisions, Federal agencies and other public safety providers.<sup>16/</sup> The Commonwealth supports such a rule because it would facilitate access to these channels by other public safety entities. Moreover, such action would be consistent with the flexibility given to public safety licensees for other public safety frequencies.

**V. THE COMMISSION SHOULD ALLOCATE ADDITIONAL SPECTRUM BELOW 512 MHz FOR USE FOR INTEROPERABLE COMMUNICATIONS.**

The Commission sought comment on whether to establish additional interoperability channels in various bands below 512 MHz.<sup>17/</sup> The Commonwealth supports such a proposal. Establishing additional interoperability channels will offer much-needed capability to public safety agencies and other providers who currently do not have access to 800 MHz channels with which to construct an interoperable system, who do not have sufficient funding to migrate to the 700 MHz or 800 MHz bands, or who simply will not have access to 700 MHz band interoperability channels until the end of the transition period in the year 2006. Accordingly, the Commonwealth urges the Commission to establish interoperability channels in bands below 512 MHz.

**VI. CONCLUSION**

The Commonwealth strongly urges the Commission to license at least a portion of the interoperability spectrum directly to states. As explained above, many states are already administering the construction and operation of interoperability spectrum and, therefore, already possess the necessary policy and technical expertise to administer

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<sup>16/</sup> Third Notice, at ¶¶ 179, 183.

<sup>17/</sup> Id., at ¶¶ 185-195.

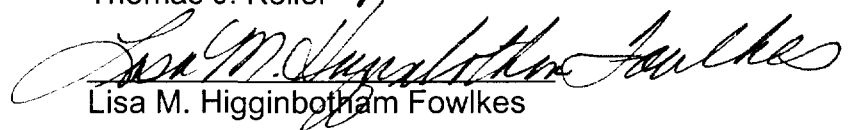
the 700 MHz interoperability spectrum in such a way that will ensure access by public safety agencies throughout the state. Consequently, these states are in a better position than regional planning committees to administer the 700 MHz interoperability spectrum. The Commonwealth also supports assigning some of the 8.8 MHz of reserved spectrum directly to states that wish to construct and operate statewide systems. As part of its efforts to facilitate construction of state or other wide-area systems, the Commission should also designate a portion of the reserved spectrum for vehicular repeater operations. Finally, the Commonwealth supports the Commission's proposal to establish additional interoperability spectrum in bands below 512 MHz. Such action will provide much needed interoperability spectrum to public safety agencies for whom use of 800 MHz frequencies and/or migration to the 700 MHz is not currently feasible.

Respectfully submitted:

COMMONWEALTH OF PENNSYLVANIA



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January 19, 1999

## **CERTIFICATE OF SERVICE**

The undersigned hereby certifies that on this 19th day of January, 1999, I caused copies of the foregoing document to be served by hand-delivery to the following:

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